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Indigenous Biodiversity Team Ministry for the Environment P O Box 10362 Wellington 6143 By email: indigenousbiodiversity@mfe.govt.nz

Dear Indigenous Biodiversity Team

RE: Proposed National Policy Statement for Indigenous Biodiversity

The Independent Electricity Generators Association (IEGA) welcomes the opportunity to make submissions on the government's proposals to protect and maintain indigenous biodiversity in the draft National Policy Statement for Indigenous Biodiversity (NPS-IB).

The IEGA comprises approximately 40 members who are either directly or indirectly associated with predominantly small scale power schemes throughout New Zealand for the purpose of commercial electricity production.¹ IEGA members are small, entrepreneurial businesses, essentially the SME's of the electricity generation sector. Numerous of members' hydro generating plant have been in place for significant periods of time in remote locations with minimal impact on the local environment.

Most importantly, in relation to the proposed NPSIB, IEGA members' generation plant is connected to the local distribution networks and is not grid connected.

IEGA members are also submitting in their own right and the IEGA support these submissions. We also support the submission by the NZ Wind Energy Association (NZWEA).

All electricity is the same and an essential service

The IEGA acknowledges the importance of New Zealand's indigenous biodiversity. However, we are disappointed the government, again², proposes a regulatory mechanism that treats groups of generation assets differently. We strongly disagree with the proposal to provide a 'carve out' for grid connected generation.

¹ The Committee has signed off this submission on behalf of members

² The proposed National Policy Statement for Freshwater Management allowed a 'carve out' for generation plant in six major catchments.

Generation plant that is not grid connected, including our members' plant, provides 10-12% of New Zealand's electricity needs.³

The discussion document claims the proposed NPS-IB is consistent with the existing National Policy Statement for Renewable Electricity Generation (NPS-REG). Treating grid connected generation more favourably than locally connected generation is clearly inconsistent with the NPSREG. The NPSREG defines **all** renewable generation as of national significance.

"The contribution of renewable electricity generation, regardless of scale, towards addressing the effects of climate change plays a vital role in the wellbeing of New Zealand, its people and the environment."

Matters of national significance

The matters of national significance to which this national policy statement applies are:

- a) the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand; and
- b) the benefits of renewable electricity generation.

Objective

To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

Generation connected to the local network (distributed generation) using renewable fuel is enabled by the NPS-REG. The NPS-REG applies to existing generation as well as new generation investment proposals.

E2 Hydro-electricity resources

POLICY E2

Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing hydro-electricity generation activities to the extent applicable to the region or district.

Further, the NPS-REG specifically identifies small and community-scale renewable generation from any source, including hydro, as a nationally significant activity. IEGA members' generation plant is typically smaller scale.

³ The discussion paper builds on 18 months work by the Biodiversity Collaborative Group (BCG). The IEGA disagrees that the

[&]quot;... this consensus-building process has given a strong platform for the successful development of the proposed NPSIB". Membership of the BCG did not include the electricity generation sector – either distributed or grid connected generation capacity. IEGA members' experience would be that some members of the BCG are frequent objectors to resource consent applications.

F. Incorporating provisions for small and community-scale renewable electricity generation activities into regional policy statements and regional and district plans

POLICY F

As part of giving effect to Policies E1 to E4, regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance and upgrading of small and community-scale distributed renewable electricity generation from any renewable energy source to the extent applicable to the region or district.

In addition, the government is consulting on proposals to amend "the National Policy Statement for Renewable Electricity Generation (NPSREG) to provide stronger direction on the national importance of renewables"⁴. The context for the proposals include the following comment:

New Zealand will need to build a significant amount of new renewable generation to meet future electricity demand and our climate change goals. Any new projects that might affect the environment, ranging from construction of wind farms and hydro dams to installations of boilers, will require resource consent under the RMA.

While describing the problem the proposals are trying to address MBIE's discussion document refers to⁵:

The Productivity Commission's (the Commission) 2018 report on a Low-Emissions Economy noted that obtaining resource consents under the RMA may slow further expansion of New Zealand's renewable energy development. The Commission found that the language of the NPSREG was not sufficiently directive to give weight to the central role for renewable energy generation in a transition to a low-emissions economy.

the Productivity Commission's Low Emissions Economy report:

13.3 The Government should give priority to revising both the NPS-REG and the NPS-ET to ensure that local authorities give sufficient weight to the role that renewable electricity generation and upgrades to the transmission network and distribution grid will play in New Zealand's transition to a low-emissions economy. This will likely require making the language of the NPS-REG and the NPS-ET more directive, and to be more explicit about how the benefits of renewable electricity generation should be recognised and given effect in regional and territorial authority planning instruments.

13.4 The Government should issue a new National Environmental Standard for Renewable Electricity Generation that sets out the conditions under which renewable energy activities are either permitted, controlled, restricted discretionary or non-complying activities under the Resource Management Act 1991. This should be drafted to increase the speed, and lower the cost and uncertainty for obtaining resource consents for a significant proportion of renewable electricity generation projects that have only minor environmental and social impacts.

⁴ MBIE Discussion Document: 'Accelerating Renewable Energy and Energy Efficiency:, submissions closed 28 February 2020

⁵ Ibid page 56 - 57

The ICCC's 2019 report on Accelerated Electrification noted the policy uncertainty between different national instruments (e.g. weighing the value for hydro generation in hydro schemes versus freshwater management goals). The ICCC also noted challenges to consenting renewable energy generation and recommended a streamlining of consenting and re-consenting processes – including constraining the ability to decline applications for wind generation due to landscape or visual considerations.

In our view, the impacts of the proposed NPS-IB on renewable generation will be significant and outweigh any positive benefits from proposals to strengthen the NPS-REG. It can already be difficult for local authorities to give appropriate weight to the importance of renewable electricity generation, especially when other national policy statements use more directive language than the NPS-REG. The draft NPS-IB contains very directive language and this problem will only be exacerbated if it comes into force as proposed.

The IEGA does not agree with the proposed carve out approach to grid connected generation infrastructure in the draft NPS-IB. *All existing renewable generation capacity has equal weight in the NPS-REG and must be placed on a consistent equal footing under the NPS-IB.*

Electricity generation operates in a competitive market for its output as well as investment in new generation capacity. *Anything other than a level playing field is anti-competitive.*

In conclusion, a carve out approach for grid connected generation is anti-competitive, discriminatory and inequitable. All electricity is an essential service for human wellbeing and all plant generating electricity must be treated equally. Renewable generating plant delivering electricity to the people of Haast, a community that is not connected to New Zealand's power system, is just as important as it is to the people of Wellington.

In the context of today's society, how we live and our socio-economic well-being electricity is an essential service. We suggest the Government also believes this. A recent joint press release by Hon Dr Megan Woods, Minister of Energy & Resources, and the Fletcher Tabuteau, Under Secretary for Regional Economic Development, confirms this:

"New Zealand First has long held a strong belief that electricity, an essential service, must be delivered to all New Zealanders at the most reasonable price that is consistent with the maintenance of a viable industry." ⁶

If the NPS-IB results in the inability to re-consent existing generation plant and / or the ability to construct new renewable generation plant this will put reliable supply of electricity at risk.

Life without the activities enabled by electricity would be unbearable for the majority, eg heating and cooling, gaining access to information, communication, employment etc, etc. And as the Government works to decarbonise the economy and looks to encourage more people to move away from using fossil-fuel powered transportation, New Zealanders' reliance on electricity will only increase. We may use it more efficiently but we will be using more of it.

⁶ <u>https://www.beehive.govt.nz/release/government-levels-electricity-playing-field-consumers</u> 3 October 2019

With the understanding that electricity is an essential service, the IEGA recommend all electricity generation plant be treated equally or equitably as nationally significant infrastructure.

As stated above, this equal treatment approach would be entirely consistent with the NPS-REG which sits alongside the proposed NPS-IB.

The NPS-IB discussion document describes nationally significant infrastructure, see below⁷. This definition makes no distinction between grid connected generation and generation connected to the local network.

"The exception for nationally significant infrastructure acknowledges that some infrastructure is essential to the nation and often constrained to specific areas. Infrastructure such as renewable electricity generation contributes to broader government goals, such as the Government's 100 per cent renewable electricity and zero carbon goals, and needs to be provided for according to other RMA national direction instruments."

Further, the following comment in the discussion paper includes a tautology as **all** renewable generation is nationally significant under the NPS-REG.⁸

⁵³ Councils would be required to provide for nationally significant renewable electricity generation (REG); the how and where would be informed by the NPSIB. Where renewable electricity generation is nationally significant infrastructure that is locationally constrained, the NPSIB has an exception to the requirement to avoid adverse effects on SNAs in the case of medium-value SNAs. This exception acknowledges the importance of renewable electricity generation, as directed by the NPSREG.

Socio-economic impacts of any change in distributed generation output

Generation infrastructure connected to local networks (distributed generation) provides important reliability benefits for local communities – both people and businesses creating local employment.

Many small generating plant have the ability to support the networks they connect to and run in "islanded mode". If this plant is unable to achieve the standards required by the NPS-IB this will in some instances jeopardise the supply of electricity to communities.

The West Coast is an important example. Local generation capacity supplies about 50% of demand on the West Coast. If restrictions are placed on the water take at Turnbull power station the lights will go out in Haast. The same can be said for Fox and Wahapo hydro power stations which often run islanded to supply Fox, Franz and South Westland.

The West coast is remote from the major generation locations and relies on two transmission routes to deliver electricity. During the ex-tropical cyclone Fehi event in February 2018 during loss of transmission connection Westpower (the distribution network company) used its 6 MW Amethyst hydro power station to black-start Hokitika's electricity supply after transmission to the region was lost. This enabled Westpower to restore power to about half its 12,000 customers.

⁷ Page 46-47 <u>https://www.mfe.govt.nz/publications/biodiversity/he-kura-koiora-i-hokia-discussion-document-proposed-national-policy</u>

⁸ Ibid Footnote 58 Page 92

Another example is distributed generation in the Cromwell / Alexandra area supplies about 60% of demand and can supply electricity to local users when the area is disconnected from the transmission grid.

The NPS-IB requirements raise a serious possibility that existing distributed generation will cease operating. The cost of ongoing compliance and re-consenting will be significant. As well as impacting reliable supply of electricity to local communities, a reduction in electricity output from distributed generating plant will impact wholesale electricity prices, with a flow-on to prices paid by consumers.

Wholesale spot prices can be highly volatile to small changes in generation output. A study of Upper South Island load control revealed an 110MWh increase in demand resulted in a 3.4% increase in the wholesale price while in a different trading period a 300MWh increase in demand resulted in an 87% increase in the wholesale price. A decrease in electricity supply will have the same impacts.

Any reduction in electricity output from distributed (non-grid connected) generating plant would:

- In the short-term be replaced by flexible fossil-fuelled generating plant that is:
 - 1) more expensive and would increases the cost of all electricity; and
 - 2) emits carbon, impacting the environment and achievement of our climate change targets.
- In the long-term if there is less hydro generation and storage capacity this will reduce the amount of wind generation that the New Zealand electricity system can efficiently absorb. Hydro storage enables run-of-river hydro to operate when there is water and intermittent wind generation to operate when there is stored for use to generate electricity when there is lower rainfall or less/no wind.

Analysis of the complementarity of wind and hydro in the New Zealand electricity system in the early days of wind revealed the New Zealand system would be reliable using the flexibility of the total current hydro output to complement wind with wind at over 20% of total electricity output.

• Wind technology is currently the lowest cost for new generation capacity. If existing sites cannot be re-consented or repowered because of the requirements of the NPS-IB, more expensive generation will have to be built to meet growth in electricity demand – pushing up the cost of all electricity.

In conclusion, any reduction in output from distributed generation resource will impact the reliability of electricity supply to local communities and activities creating employment. Further, electricity prices will increase if this reduction in output from distributed generating plant is replaced by fossilfuelled plant and if less wind generating capacity can be reliably connected to the system.

Any change to the allowable output of distributed generation will have socio-economic impacts. For IEGA members based in local communities, a change to the allowable output of an existing renewable generating plant due to the NPS-IB requirements would directly impact on the financial viability of distributed generating plant, as well as the reliability of supply to that community, the impact will be more pronounced. *Any change to biodiversity requirements must be science based.*

Disproportionate cost

The IEGA has stated repeatedly that the Resource Management Act (RMA) framework's 'one-size-fitsall' approach places a disproportionate cost on smaller scale generation plant relative to our larger competitors.

For example, re-consenting of the 100-year old 0.5MW Raetihi hydro power station took 19 years and cost over \$0.5 million (excluding the owner's time). Converting this cost to re-consenting the neighbouring Tongariro Power Scheme of 330MW would cost \$330 million.

The proposed carve out for grid connected generation in the NPS-IB exacerbates this.

Q24 asks Do you agree with the proposed definition for nationally significant infrastructure? Yes/no? Why/why not?

The IEGA does not agree with the proposed definition of nationally significant infrastructure. For the reasons above all electricity generation plant must be defined as nationally significant infrastructure.

The carve out for grid connected generation is not appropriate. All existing renewable generation capacity has equal weight in the NPS-REG and must be placed on a consistent equal footing under the NPS-IB. Anything other than a consistent approach tilts the playing field in favour of grid connected generation and is anti-competitive.

Consistency with other government policies

The IEGA notes the discussion paper states⁹:

"The proposed NPS-IB is complementary to other priorities of the current Government. For example, maintaining indigenous biodiversity and promoting restoration has a positive impact on climate change adaptation and mitigation. ... Indigenous vegetation and habit contributes to the natural character and landscape values."

Our view is that the proposed NPS-IB is inconsistent with the government's climate change and renewable energy goals. The government has made international commitments to reduce New Zealand's carbon emissions by 30% by 2030. To achieve this, the provisional emissions budget for the period 2021-2025, prepared by the Ministry for the Environment, assume a significant contribution from expanding the existing portfolio of renewable generation assets.

The following table shows some of the assumptions about emissions reductions to achieve the emission reductions required by 2025 – in particular those related to converted to use of electricity.¹⁰

To achieve the 1,100kt CO₂-e reduction in emissions from replacing fossil fuelled with renewable generating plant requires the construction of approximately 500MW of wind generation capacity before the end of 2024 to replace existing generation capacity. The assumed emission reductions in the transport, space and water heating, and process heat for food processing require further

⁹ Ibid Page 12

¹⁰ Page 22 <u>https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/reforming-the-ets-proposed-settings-consultation.pdf</u>

additional generation capacity to meet this increase in demand for renewable electricity before the end of 2024.

Sector	Change by 2025	Emissions abatement per year in 2025 (kt CO ₂ -e)
Transport	One third of the projected impact by 2030 of the currently proposed transport package has been achieved through a combination of greater electric vehicle uptake, higher efficiency internal combustion engines, and mode shift	500
Space and water heating	One sixth of space and water heating in commercial and residential buildings that currently uses coal, LPG or gas switched to biomass or electricity	300
Process heat for food processing	Half of the identified energy efficiency opportunities that are of net benefit are adopted	450
	25 per cent of process heat that currently uses coal or gas has switched to biofuels or electricity	700
Electricity	One-third of the electricity efficiency potential identified by EECA is implemented	450
	Additional wind and geothermal renewable stations are built to displace the remaining baseload gas-fired power station by mid-2024 ⁸	1,100

Plant to generate electricity from renewable resources by definition must be located where the resource is – ie, a windy landscape for wind turbines or where there is water for hydro generation.

Plant to generate electricity from fossil fuels can be located anywhere, for example in an area that the local authority has already designated as industrial. The footprint of the thermal generating plant can also be significantly smaller than that of a wind farm. On this basis we suggest the NPS-IB proposals may be favouring fossil-fuelled generation ahead of renewable generation plant.

In our view, when finalising the NPS-IB officials must carefully balance the:

- government's climate change goals and aim to transition to a low emissions economy;
- very strong role expected from renewable electricity generation to achieve lower carbon emissions, including in sectors where electricity has not been used previously; and
- fundamental driver of the location of renewable generating plant being the location of the renewable resource.

An NPS-IB that restricts the ability to consent new renewable generation capacity or re-consent existing capacity will limit New Zealand's ability to meet our international climate change commitments.

Improve the focus

The discussion document highlights that¹¹

Approximately 33 per cent of New Zealand's land area is public conservation land (PCL) administered by DOC, and another 6 per cent is other Crown land.

Public conservation land is managed to protect natural, historic and cultural heritage, retain areas of wilderness, and provide recreation opportunities.

The IEGA supports Option 2 where SNAs are applied to higher value public conservation land¹² and the Crown is responsible for this. We query if the Department of Conservation already knows the indigenous biodiversity value of this land?

The IEGA suggests the Crown provide leadership and complete the work required by the proposed NPS-IB of higher value public conservation land as soon as practicable. This work could identify any implementation issues with the NPS-IB which could then be refined – thus improving the processes for others to follow (an implementation assistance measure).

If some Crown land is assessed to have low indigenous biodiversity value, the government should assess whether this land can be made available for other uses – for example renewable electricity generation where the renewable resource is available.

Timeframes

It is critical that enough time is allowed so that implementation of this key focus for government is not set up to fail. Enough time must be provided to ensure that the best science is utilised, that meaningful consultation takes place and that change is implemented at a pace and cost that can be afforded, and that capacity and capability allows.

We are anxious about any Councils resorting to a 'best guess' approach due to tight timeframes or a lack of science. This, as well as being required to take a precautionary approach, will likely lead to a conservative approach being implemented, which could, in turn, potentially unduly restrict activities and operations. Poor information may be relied on to make decisions or poor decisions may be made.

The IEGA acknowledges the government's desire to see improvements in indigenous biodiversity. However, the degree of urgency to bring about changes introduces a significant risk that the social and economic consequences from implementation are not fully understood with significant implications or unintended consequences.

We also note that the government proposes "*The first assessment of the effectiveness of the proposed NPS-IB is to be undertaken eight years after gazettal*".¹³ The IEGA query if this is good regulatory

¹¹ Ibid Page 81

¹² Ibid Page 82

¹³ Ibid Page 78

practice. While it may take some time to implement and improvements to become evident, leaving a new regime 'unattended' for eight years seems a long time.

Other comments

Increased costs for small businesses and implementation assistance

While the proposals include a policy to "ensure better information on indigenous biodiversity is collected and provided as part of an AEE that accompanies an application for resource consent"¹⁴ this comes at a cost. The devil will be in the detail. An increase in cost imposts on small businesses must be balanced against the biodiversity gains – a pragmatic approach would be desirable.

The IEGA supports the government considering all forms of implementation assistance (guidance material, technical and scientific expertise, financial support) suggested in Question 58.¹⁵

Role of Regional Authorities

The proposed NPS-IB leaves Regional Councils with a substantial ongoing workload. Some commentators say the NPS-IB provides less clarity and more ambiguity for interpretation by the Regional Authorities.

This perpetuates the IEGA's concerns that some members are dealing with multiple territorial authorities with different approaches and requirements as they have generating plant, with essentially the same characteristics, located in different regions of New Zealand.

The IEGA queries if the Regional Authorities have the capacity and capability to meet the Government's expectations with respect to indigenous biodiversity.

Application to freshwater environments

The IEGA supports that the NPS-IB does not extend to freshwater environments. The National Policy Statement for Freshwater Management already includes direction for managing ecosystem health in freshwater environments and it would be inappropriate for the NPS-IB to introduce potentially conflicting direction.

It is also unclear how significant freshwater species could be mapped using the proposed criteria, given their mobility and distinct environment, and as hydro power plants must be located on suitable water bodies it would be unworkable to require them to avoid all adverse effects on fish species. Broadening the application of the NPS-IB to freshwater indigenous biodiversity could have very serious implications for hydro-electricity generation.

¹⁴ Ibid Page 79

¹⁵ Ibid Page 88

Conclusion

Our understanding from technical experts is that the proposed NPS-IB is ambiguous. The proposed NPS-IB was also drafted and issued for consultation prior to the government completing its wider review of the indigenous biodiversity strategy.

The IEGA suggests it is important that an integrated plan is in place to ensure key biodiversity risks and issues are comprehensively managed and that the full 'toolbox' is available. The current focus simply on 'avoiding' is potentially costly with unintended consequences. A mitigation hierarchy, including offsetting and compensation, has a role in managing effects.

We rely on technical experts to comment on the specific proposals for managing biodiversity. At a high level we are concerned to ensure the NPS-IB is an appropriate balance of efforts to manage indigenous biodiversity compared with other important demands on New Zealand's environment, including using the positive benefits of our abundant renewable resources to generate renewable electricity to significantly reduce our carbon emissions.

While we have not commented on the detailed proposals as they might affect our generation activities we understand there is the potential for the draft NPS-IB to severely limit the ability to construct new renewable generation capacity or re-consent existing renewable generation capacity. Again, this would be inconsistent with key legislated carbon emission targets.

The IEGA's key concern is the proposed preferential treatment of grid connected generation relative to distributed generation. The NPS-IB must treat all electricity as equal and of national significance. We strongly recommend the NPS-IB be amended to treat small generation schemes the same as grid connected generation. Small generation schemes throughout New Zealand are critical to meeting New Zealand's climate change targets as well as our renewable energy targets (in the same way that the NPS-REG recognises them as of national significance). These local generation plant are critical to the socio-economic wellbeing of local communities by providing the essential service of electricity.

The IEGA would welcome the opportunity to discuss this submission with you in more detail.

Yours sincerely

WSMENas

Warren McNabb Chair